Input/Output Modules

A5B Series Low-cost Signal Conditioning System

The A5B series provides economical signal conditioning and isolation for inputs to A/D boards and outputs from D/A boards. Plug-in modules feature industry-standard pinouts and fixed I/O ranges (no pot adjustments).

Up to 16 modules plug into a backpanel (multiplexed or non-multiplexed) that is easily mounted in a 19-inch rack. Each A5B module is powered from 5V DC and provides a single channel of isolated analog input or output. Modules are assembled from the highest quality components, encased in thermally conductive hard potting, and subjected to strict testing and quality control.

Analog input modules

Input modules interface to all types of sensors, then filter, isolate, amplify (some models also linearize), and convert to a high-level analog voltage output.

The voltage output is logic switch controlled, which allows these modules to share a common analog bus without the requirement of external multiplexers. If desired, the output switch can be turned on continuously by simply grounding the read-enable pin.

- DC millivolt/voltage
- DC current
- RTD
- Thermocouple types J, K, T, E, R, S, and B
- Linearized thermocouple
- Strain gauge
- Wide-bandwidth millivolt/voltage

Analog output modules

Output modules accept a high-level analog voltage signal from a host system, then buffer, isolate, and amplify before providing a process current output to field devices.

- 4 to 20mA DC
- 0 to 20mA DC

Solid-state plug-in relays

Acromag also offers digital I/O modules for interfacing logic levels in a variety of measurement and control applications.

■ Special Features

- A six-pole filter provides superior noise rejection to minimize unwanted signal interference
- Low output ripple with no spikes enables more precise measurements
- Isolation eliminates ground loop errors and protects equipment from harmful transient signals
- Industry-standard format ensures compatibility with existing systems
- Economy price helps meet tight budgets

A5B Series